

Applicant : Robert A. DeJonge et al.
Appln. No.: 10/820,424
Page 2

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1-22 (canceled)

Claim 23 (previously presented): A shifter for controlling the transmission of a motor vehicle, comprising:

a base;

a shift member movably mounted to the base;

a shift gate fixed to said shift member, said shift gate having a plurality of transmission control positions; and

said shift member movable to input positions corresponding to said transmission control positions; and:

a powered pawl fixed to the base for selectively engaging said transmission control positions of said shift gate to restrict movement of said shift member; and including:

a controller that actuates said powered pawl based at least in part on at least one vehicle operating parameter in addition to an input from a vehicle ignition, a position of the shift member, and a position of a vehicle brake pedal.

Claim 24 (original): The shifter of claim 23, wherein:

said at least one vehicle operating parameter comprises engine r.p.m.

Claim 25 (original): The shifter of claim 23, wherein:

said at least one vehicle operating parameter comprises the vehicle speed.

Claim 26 (previously presented): The shifter of claim 23, including:

a controller operably coupled to said powered pawl;

Applicant : Robert A. DeJonge et al.
Appln. No.: 10/820,424
Page 3

a sensor generating a signal to said controller such that said controller can determine which input position said shift member is in; and wherein:

said controller controls said powered pawl based upon vehicle operating parameters and the position of said shift member.

Claim 27 (previously presented): The shifter of claim 26, wherein:

said sensor generates a signal proportional to the distance moved, and said controller controls said powered pawl based on said signal.

Claim 28 (previously presented): The shifter of claim 26, wherein:

said controller controls said powered pawl based on the number of times said input member is moved during a predetermined time interval.

Claim 29 (original): The shifter of claim 28, wherein:

said controller moves said pawl a first distance if said input member is moved once during said time interval, and moves said pawl a second distance that is different than said first distance if said input member is moved twice during said time interval.

Claim 30-50 (canceled)

Claim 51 (previously presented): A shifter for motor vehicle transmissions, comprising:

a base;

a shift member movably associated with the base for movement to a plurality of gear positions;

a powered pawl mechanism configured to selectively restrict movement of the shift member; and

Applicant : Robert A. DeJonge et al.
Appln. No.: 10/820,424
Page 4

a controller configured to control the powered pawl mechanism based at least in part upon at least one vehicle operating parameter other than the position of a brake pedal, a position of the shift member, and a vehicle ignition.

Claim 52 (original): The shifter of claim 51, wherein:

the powered pawl mechanism includes a pawl member and a shift gate, and wherein the pawl member is selectively shifted into engagement with the shift gate.

Claim 53 (original): The shifter of claim 51, including:

an input device permitting an operator to provide the controller with a signal, the controller controlling the powered pawl based at least in part on the signal.

Claim 54 (original): The shifter of claim 53, wherein:

the shift member comprises a shift lever;

the input device comprises a movable member mounted on the shift lever.

Claim 55 (previously presented): The shifter of claim 54, wherein:

the movable member comprises a button that translates linearly between a rest position and an actuated position.

Claim 56 (original): The shifter of claim 54, wherein:

the controller controls the powered pawl based at least in part on a selected one of the position, velocity, and acceleration of the movable member.

Claim 57 (original): The shifter of claim 54, wherein:

the movable member shifts between first and second positions; the controller controlling the powered pawl based at least in part on the number of times the movable member is shifted between the first and second positions.

Applicant : Robert A. DeJonge et al.
Appln. No.: 10/820,424
Page 5

Claim 58 (previously presented): The shifter of claim 55, including:

a release mechanism permitting an operator to manually control the powered pawl mechanism when the button is in the rest position.

Claim 59 (original): The shifter of claim 51, including:

the controller determines at least a selected one of the position, velocity and acceleration of the shift member and controls the powered pawl mechanism based at least in part on the selected one of the position, velocity and acceleration.

Claim 60-79 (canceled)

Claim 80 (previously presented): A shifter for vehicles, comprising:

a base;

a shift member movably mounted to the base for movement to a plurality of gear positions;

a shift gate on one of the base and the shift member, the shift gate having a plurality of notches corresponding to the gear positions;

a powered pawl on the other of the base and the shift member, wherein the powered pawl is shiftable to an engaged position engaging the shift gate to at least partially restrict movement of the shift member relative to the base;

the powered pawl including a solenoid having a housing and a rod movably mounted within the housing, the rod including a magnet, wherein the magnet is encapsulated by a resilient material fixed to the rod to form an integral damper to reduce noise.

Claim 81 (previously presented): The shifter of claim 80, wherein:

the magnet is ring shaped with generally parallel side faces.

Claim 82 (original): The shifter of claim 81, wherein:

Applicant : Robert A. DeJonge et al.
Appl. No.: 10/820,424
Page 6

the rod is made of a polymer material molded at least partly around the magnet.

Claim 83 (original): The shifter of claim 82, wherein:

the resilient material defines a melting temperature; and

the polymer material has a melting temperature that is greater than the melting temperature of the resilient material.

Claim 84 (original): The shifter of claim 83, wherein:

the polymer material extends along at least a portion of the side faces of the magnet to retain the magnet.

Claim 85-170 (canceled)